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REVIEW ARTICLE:
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INSTRUMENTS AND METHODOLOGIES

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REVIEW ARTICLE:

Update on Suicide Assessment Instruments and Methodologies

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Abstract

This review summarizes the current status of suicide assessment and focuses on suicide-specific instrumentation and methodologies developed in the last 30 years. The purpose is to provide a brief overview and comparison of modern suicide assessment tools. The emphasis is on instruments and methodologies that may have utility beyond the individual clinical application. Thirty-two suicide rating scales, as well as case vignettes, psychological autopsies, suicide reviews, and postsuicide assessment instruments are described. The Scale for Suicide Ideation–Worst and the military’s postsuicide assessment instruments appear to have the greatest reliability, broadest application, and utility for large-scale intervention/prevention purposes.

In their meta-analysis of 81 published studies on the predictability of suicidal behavior, van Egmond and Diekstra (1990) concluded that suicide prediction research had made little headway in the previous 25 years. Dr. Robert Litman, in his plenary address to the 1995 annual conference of the American Association of Suicidology, noted that the prediction of suicide is like the prediction of earthquakes in that more vulnerable individuals and groups can be identified, but it is not possible to predict which individual will commit suicide or when (Litman, 1996). This is not to say that there has not been much learned about suicide in 30 years. For example, we know that almost 70-75% of the people who commit suicide give advance communication of their intention (Jacobs, Brewer & Klein-Benheim, 1999; Litman, 1996). More than 60 variables have been identified as differentiating various suicidal and nonsuicidal subjects (van Egmond & Diekstra, 1990). Numerous research results can be used to distinguish suicide completers, attempters, and natural deaths (Maris, 1981). Much of what we have learned about suicide over the last 30 years has come from the application of suicide assessments. Suicide assessment is used here in the broad sense to include any empirical or systematic means of estimating suicide potential, suicide intent, or of identifying those at risk of suicide. Both predictive and retrospective assessment strategies are included. In addition to using standard rating scales, several new methodologies offering alternative suicide assessment procedures have recently been developed. This review summarizes the current status of suicide assessment and focuses on suicide-specific instrumentation and methodologies developed in the last 30 years. The purpose is to provide clinicians and researchers a brief overview and comparison of modern suicide assessment tools. The emphasis is on instruments and methodologies that may have utility beyond the individual clinical application and that may be administered in a population or group setting. For this reason, clinical interviewing strategies or judgments, such as the

innovative CASE Approach (see Shea, 1999), and use of biological markers, while having certain clinical utility, have limited practical application in a population or group administration, and therefore are not reviewed here.

Suicide Assessment Scales

Previous Reviews

Several excellent reviews of suicide assessment instruments have been published in the last 30 years. Lester (1970) reviewed numerous commonly used standard psychological tests and specially devised tests and concluded that the use of standard psychological tests, such as the Rorschach, MMPI, TAT, and Bender-Gestalt, had not been fruitful. Of the tests devised specifically to identify and predict suicidal risk, the PSPI (Devries, 1966) appeared to be useful but not yet adequately evaluated. Tests devised to use admissions data and data from personal history appeared to be the most useful. Brown and Sheran (1972) in their review, found that "neither single signs, standard psychological tests, specially devised tests, clinical judgments, nor scales" were able to predict suicide at useful levels. Scales were considered to offer the best predictive potential but required better construction. Of several rating scales "useful in the detection of suicide risk" reviewed by Englesmann and Ananth (1981), the Suicide Potential Scale (revised by Miskimins and Wilson [1969]) was recommended for the detection of suicidal risk. These authors also concluded that no suicide rating scale could be applied to all populations, and that agencies and institutions should devise their own screening instruments and procedures for identifying patients at risk. Farberow (1981) reached a similar conclusion from his review of scales available in the 1970's: that research should concentrate on the development of specific measures for certain types of individuals in particular situations.

Subsequently, Burk, Kurz, and Moller (1985) inquired whether suicide risk scales helped to predict suicidal behavior. They reviewed 15 scales and concluded that well-constructed risk scales, such as those of Farberow and MacKinnon (1974) and Pallis, Barraclough, Levey, Jenkins, & Sainsbury (1982), were "capable of identifying persons with a high probability of future suicide." Although Burk et al. conceded that the accuracy of prediction was not satisfactory from a statistical point of view, they suggested that risk scales may be helpful in clinical management. Most recently, Rothberg and Geer-Williams (1992) reviewed 19 suicide prediction scales and noted considerable variation and some conflicting results in the risk estimates applied to several clinical cases. Further noted was a relative absence of information on the psychometric properties of the scales and that additional work characterizing suicide risk assessment instruments was needed.

Suicide-Specific Scales

Starting with MEDLINE and Psychological Abstracts on-line literature searches, and continuing with the so-called snowball approach, 32 published articles describing the development of a suicide prediction or intention scale were identified (see Table 1). Criteria for inclusion in this review included English language instruments designed for adult populations and described in the professional literature since 1966. This time period permitted the inclusion of a maximum number of instruments in use over the last 30 years. In addition, only suicide-specific scales, as opposed to broader psychological symptom, state, or disorder measures such as the MMPI, were included. Scales such as Beck's Hopelessness Scale, while also predictive of suicidal risk, were omitted because they were designed to reflect a respondent's negative expectancies in a variety of psychopathological conditions, rather than suicide risk per se (Beck, Weissman, Lester, & Trexler, 1974b).

Table 1 shows the instruments in chronological order of their initial publication in the literature. To facilitate instrument evaluation, the length, purpose, tested population and selected available psychometric information are presented. Although several instruments have been used in numerous studies, additional references have not been cited unless significantly new psychometric data were obtained.

Scales varied greatly within descriptive categories. The length of scales varied from 6 to 50 items. Although the majority of instruments were designed to predict suicide or suicidal behavior, several related purposes included the assessment of ideation and assessment of lethality/seriousness of attempt. Others were designed for use with a specific population, such as prisoners, hospitalized patients, or callers to a suicide prevention center. The majority of instruments were designed as clinical interview forms and were tested on patient populations. The second most frequent data source was clinical or police records, followed by self-report. The exceptions to patient populations included suicide attempters identified from police records, prisoners, callers to a suicide prevention center, samples of high school students, and various community volunteer samples. Sample sizes ranged from a low of 20 to a high of 3,701 psychiatric patients. The majority had poor to modest predictive ability. Of studies that included follow-up of patients, the longest follow-up period was 15 years. This study (Beck, Brown, Steer, Dahlsgaard, & Grisham, 1999) was also the most recent one, the one with the largest sample size, and the one reporting the greatest internal consistency and most adequate psychometric information. As such, the SSI-W appears to be the current standard or state-of-the-art instrument. Nevertheless, a number of limitations remain with suicide rating scales. Briefly, most are based on a prediction rather than an assessment model, cannot be validly applied to

different groups of individuals or clinical settings, do not weight the risk factors in their scales, and do not permit an interaction effect among the risk factors (Stelmachers, 1992).

Other Suicide Assessment Methodologies

Case Vignette Method

In an attempt to overcome the shortcomings of suicide potential rating scales, at least two studies have applied a case vignette method to suicide risk assessment (Stelmachers, 1992). In the case vignette method, a series of medical records from a crisis intervention center's files were summarized and abstracted to include most of the data relevant to the assessment of suicide risk. These vignettes were intended for use as anchoring points for levels of suicide risk to guide clinicians in their future judgments of short-term and long-term suicide risk ratings. These studies found poor reliability of clinical judgments about the selection of crisis management procedures and clinical dispositions. Further, judgments about the desirability of various procedures and dispositions were not significantly more reliable than judgments about suicide risk.

Psychological Autopsies

"The phrase 'psychological autopsy' refers to a procedure for reconstructing an individual's psychological life after the fact, particularly the person's lifestyle and those thoughts, feelings, and behaviors manifested during the weeks preceding death, in order to achieve a better understanding of the psychological circumstances contributing to a death. The essential ingredients of the psychological autopsy method include face-to-face interviews with knowledgeable informants within several months of the death, review of all extant records describing the deceased, and comprehensive case formulation by one or more mental health professionals with expertise in postmortem studies." (Clark & Horton-Deutsch, 1992, 144).

The utility of the psychological autopsy appears to vary with its primary purpose from assisting certifying officials in determining the most likely mode of death in equivocal cases

(Selkin, 1994; Shneidman, 1994) to understanding the circumstances and state of mind of the victim at the time of death (Gelles, 1995). Psychological autopsies are considered important to the study of antecedents of suicide and prediction of future suicides (Clark & Horton-Deutsch, 1992). In their review of the literature, Clark and Horton-Deutsch (1992) suggested that "the well-controlled psychological autopsy study may be the best available window onto the phenomenon of suicide in all its diverse aspects and textures" (pp. 145). However, numerous shortcomings have been identified both conceptually and practically with the psychological autopsy (Selkin, 1994). Psychological autopsies on the average take 12 - 20 hours to complete and have no standardized guidelines (Gelles, 1995). Many psychological autopsies terminate inconclusively because no decision rules have been established for the procedure (Selkin, 1994). Several investigators have noted the lack of studies on the reliability and validity of the psychological autopsy method (Beskow, Runeson, & Asgard, 1990; Poythress, Otto, Darkes, & Starr, 1993). Investigators have noted that unless data from various informants are elicited with a standardized protocol, the quantity and quality of data will vary as a function of the informant and the interviewer, and reconciling discrepant information from different sources will be fraught with biases. Comparison groups, which are rarely included, are needed to adequately interpret psychological autopsy findings (Clark & Horton-Deutsch, 1992). Special training is required to appropriately deal with grieving and sometimes hostile or suspicious informants who may be motivated to conceal information (Selkin, 1994). The Army, which mandates the use of psychological autopsies on all suspected suicides, recently identified unmet needs for conducting and using the results of psychological autopsies including (1) when a psychological autopsy is to be performed, (2) who performs it (including qualifications), (3) how the results should be used, (4) the establishment of a quality assurance review process, and (5) appropriate management

processes to ensure oversight of the analysis (Rothberg, 1998). It further noted the omission of fundamental data elements about the individual's military life, such as how long the person had been a soldier. In a review of the methodological issues in using psychological autopsies to study suicide, Hawton et al. (1998) noted that it is the pooling of information from all available sources that is likely to result in the most valid and reliable findings. Perhaps the main benefit of the psychological autopsy approach is that it allows the study of the suicidal process, especially the sequence of events and experiences that lead to death, which in turn provides valuable information for determining potentially effective strategies for preventing suicide.

Root Cause Analyses/Suicide Reviews

An alternative to the psychological autopsy, which focuses on lessons learned, is a form of assessment called Root Cause Analysis (RCA). This is a systematic, problem-solving methodology utilized in a variety of industries, and which is now mandated by the Joint Commission for the Accreditation of Healthcare Organizations (JCAHO) for the analysis of sentinel events (among them, inpatient suicide). The purpose of the RCA applied to any suicide (inpatient, outpatient or of a non-patient) is to identify factors that are amenable to policy, procedural and/or other system changes. These factors are identified during the course of meetings of all personnel involved in the care and management of the victim, plus other persons who are felt to be able to potentially contribute to a better understanding of how the incident took place and why protective barriers and preventative measures failed to function optimally. An RCA may be conducted to identify factors that led or contributed to a suicide: environmental, situational social, occupational issues, etc., as well as factors that failed to prevent the incident. An improvement tracking system is used to track process or system improvement(s) that are identified through the RCA, and is used in the improvement of patient care. When used in the

healthcare environment, the RCA work product is an internal, confidential Quality Assurance document that specifies root causes (or root contributory factors), corrective actions, and how the corrective action will be monitored or measured for effectiveness. This method has been successfully used in the Navy to identify and evaluate organizational suicide interventions. A similar peer review assessment, called the suicide review, is considered a valuable instrument in the process of improving patient care in a health maintenance organization and is described by Stelovich (1999). Both RCAs and Suicide Reviews are conducted under strict guidelines for peer review proceedings to protect the privacy of participants and ensure the efficient use of their time. Accordingly, the dissemination of their findings is limited within individual institutions.

Postsuicide Assessment Instruments

Because of the difficulties and limited applicability of the suicide rating scales, psychological autopsies, and RCAs, and the need for timely clinical and epidemiological information, the U.S. military has been instrumental in developing methods of suicide assessment for monitoring trends and prevention program planning. The Department of the Navy (DON) designed an alternative data collection instrument titled the DON Suicide Incident Report (DONSIR). The purpose of this alternative instrument is to provide the Department of the Navy with the same type of information gathered in the psychological autopsy but collected in a standardized, structured format to accelerate access to information and reduce bias in the data collection process. The DONSIR focuses on military sources of data only, minimizing interactions with family and friends. Although information from nonmilitary family and friends may also be included, it is not required for completion of the form. Consisting of 102 items, the DONSIR includes a wide range of demographic, casualty, military service, medical, services use, and command or work site situation information, as well as administrator feedback items,

command interview forms, and a narrative summary form. Forms are reviewed and processed for coding errors and missing data prior to entry into an ACCESS database. Excel and SPSS/SAS files are used to produce periodic clinical and statistical reports to suicide prevention program managers as well as more complex analyses for research protocols.

The Air Force Suicide Event Surveillance System includes a somewhat less comprehensive data collection instrument but includes all suicides as well as nonfatal attempts in a secure web-based reporting system. The Department of Defense has recently drafted a multi-service postsuicide assessment and surveillance review and reporting process. It is expected to create common data collection procedures and policies for the support and enhancement of suicide prevention efforts across all branches of the military. These combined data should help overcome problems with low base rate events.

Conclusions

For the most part, suicide assessment via rating scale – whether completed by clinicians, patients, or others, or whether intended to predict subsequent completed suicide or assess an individual's suicidal behavior or intention – still leave much to be desired. Although several investigators have previously questioned the utility or predictive value of rating scales, this review shows that improvement in the construction and psychometric properties of the scales has occurred in recent years and that alternative assessment methodologies show promise for the identification of groups at high risk for suicide.

Suicide assessments have generally fallen into two broad categories: instruments or scales designed to predict suicidal behavior prior to a completed suicide and instruments or methods designed as retrospective inquiries to determine risk factors following a suicide. While the former focuses more on individual risk for clinical purposes, the latter may be more useful at

identifying high-risk groups or populations for prevention purposes. As such, the sensitivity and specificity relationships are not the same and the means for evaluating the instruments will be different. For example, as their primary role as data collection forms, little to no psychometric information is available on the latter category of instruments.

Among the suicide rating scales, Beck et al.'s (1999) Scale for Suicide Ideation–Worst appears to show the greatest reliability and utility. Its unique contribution is the measurement of suicide ideation at its worst point, the only significant predictor of eventual suicide in his large sample, rather than current ideation, which was found not to be a significant predictor. Research remains to show, however, its applicability to other demographic and patient groups.

Among other suicide assessment methodologies, postsuicide assessments seem to have the broadest and most general application. They appear to serve overlapping purposes with psychological autopsies and suicide reviews but permit the quantification and pooling of results that can provide feedback into intervention and prevention activities or programs. These findings suggest that prevention of an individual's suicide may better be accomplished through population or group-based risk-factor assessment and intervention.

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Table 1. Suicide Assessment Instruments, 1966—1999*

Title/reference	Description/purpose	Tested population	Administration	Psychometrics
Potential Suicide Personality Inventory (PSPI) (Devries, 1966)	13 or 50 items to differentiate suicidal from nonsuicidal patients	130 suicidal and 83 nonsuicidal male neuro-psychiatric inpatients	Self-report questionnaire	55% of suicidal subjects and 79% of nonsuicidal subjects correctly classified
Instrument for the Evaluation of Suicidal Potential (IESP) (Golden Gate Clinic Instrument-GGCI) (Cohen, Motto, & Seiden, 1966)	14-item instrument to discriminate future suicidal behavior	193 suicide attempter inpatients	Nonclinical questionnaire interview	49% of patients with highest scores (7+) attempted or committed suicide in 5-8 year follow-up
Revised Suicide Potential Scale (RSPS)(Dean, Miskimins, De Cook, & Wilson, 1967; Miskimins & Wilson, 1969)	16-item clinical instrument to predict potential suicide	31 suicides, 24 potential inpatient suicides, 162 nonsuicidal hospital controls	Medical records	Mean score higher for suicides; 58% correctly classified (Braught & Wilson, 1970) (Braucht & Wilson, 1970)
Scale for Assessing Suicide Risk of attempted suicides (SASR) (Tuckman & Youngman, 1968)	17-item scale to identify individuals with high suicide potential	3,800 attempters; 1959-1966 from police records	Police records	Highest score yielded highest suicide rate of 61/1000. Does not predict suicide potential among psychiatric inpatients (Resnick & Kendra, 1973)
Nijmegen Suicide Prediction Questionnaire (van de Loo & Diekstra, 1970)	14 items to predict subsequent suicide attempts	152 attempter and 57 completed suicide inpatients	Medical and police files	Approximately 80% of each group classified with cut-point at 5
Risk-Rescue Rating (Weisman & Worden, 1972)	10 items to assess lethality of suicide attempts	100 hospital "suicide cases"	Medical records	Risk score $r = .56$ with level of treatment, interrater reliability $\alpha = .93 - .95$

*Published suicide-specific instruments (i.e., not assessing depression). Does not include studies of individual variables or scale items. Medline parameters: English language, adult population, since 1966.

Table 1. Suicide Assessment Instruments, 1966—1999* (Cont'd)

Title/reference	Description/purpose	Tested population	Administration	Psychometrics
Suicidal Death Prediction Scales (Los Angeles Suicide Prevention Center Scale) (Lettieri, 1974)	4 age- and sex-specific scales of 8-14 items to predict death by suicide within 2 years of call to suicide prevention center (long and short forms)	465 alive callers to LASPC, 52 callers known to die	Telephone interview of callers to suicide prevention center	Specificity ranged .70 - .94, Sensitivity ranged .78 - .93
Intent-to-Die Scale (Freeman, Wilson, Thigpen, & McGee, 1974)	two 5-point ordinal scales to assess suicide intentionality	277 attempted and 34 completed suicides reported to intervention center by law enforcement	Crises center case records	Reliability correlations: .71 - .97. Mean probability of dying = .123, $SD = .215$
Suicide Intent Scale (Beck, Schuyler, & Herman, 1974a)	15-item survey, 2 parts to assess seriousness of attempt and subsequent suicidal risk	231 attempter inpatients (1971-1973), 194 completed suicides from medical examiner's office	Part I: case files of medical examiner; Part II: clinical interview	Interrater reliability for Part I: $\alpha = .91$; completed had higher means than attempters
Scale for Predicting Subsequent Suicidal Behavior (SPSSB) (Buglass & Horton, 1974)	6-item scale to predict subsequent suicidal behavior	766 Poisoning Treatment Center inpatients	Medical records	Probability of repetition = 48% for scorers of 5 or 6. Probability of repetition = 45.5% for Italian scorers of 3-6 (Garzotto, Siani, Tansella, & Tansella, 1976) (Siani, Garzotto, Tansella, & Tansella, 1979)
Neuropsychiatric Hospital Suicide Prediction Schedule (Farberow & MacKinnon, 1974)	11-item scale to predict potentiality of committing suicide in patients being considered for release from hospital	187 inpatient suicides (1966-1968), 194 nonsuicide inpatient controls	Clinical review of medical records	Correctly identified 79% of eventual suicides and incorrectly identified 25% of controls
Index of Potential Suicide (IPS) (Zung, 1974)	69 variables in 2 parts to predict high risk for suicide	275 psychiatric inpatients	Self-rating, interviewer rating, and significant other rating forms	No difference in mean social scores by suicide behavior groups; clinical scores lower in no-suicide-behavior group

*Published suicide-specific instruments (i.e., not assessing depression). Does not include studies of individual variables or scale items. Medline parameters: English language, adult population, since 1966.

Table 1. Suicide Assessment Instruments, 1966—1999* (Cont'd)

Title/reference	Description/purpose	Tested population	Administration	Psychometrics
Intent Scales (IS) (Pierce, 1977; Pierce, 1981)	12-item scale to predict subsequent suicide	500 self-injury inpatients	6 items from case files, 4 self-report, 2 clinical judgments	Correlation = .93 with Beck Suicide Intent Scale. Mean for suicide during 5-year follow-up not different from nonsuicides
The Scale for Suicide Ideation (SSI) (Beck & Kovacs, 1979)	19-item clinical research instrument to assess ideation	90 psych inpatients with suicidal rumination, mostly depressed	Clinician semistructured interview	Internal consistency: alpha = .89 Interrater reliability: alpha = .83 Construct validity: $r = .47$ w/Hopelessness Scale; $r = .39$ w/Beck Dep Inventory
New clinical scales to estimate suicide risk among attempted suicides (Pallis et al., 1982)	(a) 20-item long scale, (b) 7-item short scale to identify mental states preceding nonfatal and fatal suicide attempt	(a) 151 attempted suicide inpatients, (b) 75 completed suicides notified to coroner—Britain	(a) semistructured interview, (b) average 4 informant interviews	(a) Correctly classified 91%; incorrectly classified 9%; (b) Correctly classified 83%; incorrectly classified 16%
Reasons for Living Inventory (RFL) (Linehan, Nielsen, & Chiles, 1983)	48 items w/ 6 subscales to measure reasons for not committing suicide	218 Washington, DC, adult volunteers, shoppers, students, workers, and 213 Seattle shoppers and students	Self-report questionnaire	Internal reliability of scales: .72 - .89; survival and coping scales? correlated with suicidal behavior but did not distinguish between hospitalized attempters and ideators
SAD PERSONS scale (Patterson, Dohn, Bird, & Patterson, 1983)	10 items for assessing the risk of suicide	2 videotapes of patients shown to 36 medical students and 21 controls	Clinical judgment aid	Students more accurately assess risk than controls
Lethality of Attempt Rating Scale (Smith, Conroy, & Ehler, 1984)	11-point (0-10) scale for measuring the degree of lethality of suicide attempts	24 psychiatric staff members rated 24 attempt vignettes	Clinical judgment aid	Intraclass reliability: rs = .81 to .98

*Published suicide-specific instruments (i.e., not assessing depression). Does not include studies of individual variables or scale items. Medline parameters: English language, adult population, since 1966.

Table 1. Suicide Assessment Instruments, 1966—1999* (Cont'd)

Title/reference	Description/purpose	Tested population	Administration	Psychometrics
Risk Estimator for Suicide (Motto, Heilbron, & Juster, 1985)	15 risk variables to estimate degrees of suicide risk in hospitalized adults	3,005 mental health inpatients (1969-1974)	Clinical interview	Rate of suicide in high-risk category = 6.8-9.6%, low risk category = 3.0-3.8% (overall sample = 4.9%)
Suicide Assessment Scale (SAS) (Stanley, Traskman-Bendz, & Stanley, 1986)	20 items to assess changes in levels of suicidality	62 attempters & 47 non-attempter psychiatry patients	Semi-structured clinical interview	Interrater reliability: $r = .78 - .88$; higher means for attempters than nonattempters
Suicide Risk Scale (SRS) (Plutchik & van Praag, 1986)	26 items to distinguish between suicidal ideation and behavior	80 outpatient Israeli soldiers	Self-report (yes-no) questionnaire	Internal reliability: $\alpha = .84$; not an effective discriminator of suicidal severity (Koslowsky et al., 1991)
The Suicide Checklist (Arboleda-Florez & Holley, 1988)	24 items to provide an estimate of suicide potential	18 prisoners	Clinical interview	Marital status only direct statistical predictor of suicide risk. Interaction of criminal and clinical variables correctly discriminated 100% of active suicide risks (Arboleda-Florez & Holley, 1989)
Suicide Ideation Questionnaire (SIQ) (Levine, Ancill, & Roberts, 1989)	17 items to predict subsequent suicide	102 deliberate self-harm inpatients	Computerized interview	Depression scale more sensitive than SIQ; computer better predictor than clinician
Suicide Probability Scale (SPS) (Eisenberg, Hubbard, & Epstein, 1989)	36 items to assess suicide risk in clinical and nonclinical adolescents and adults	1,397 veteran inpatients; also 390 university undergrads (Bagge & Osman, 1998)	Self-report	Not useful in differentiating degrees of lethality, may be useful in identifying suicidal ideation in non-mental health settings (Eisenberg, et al., 1989). Factor structure and norms confirm revision of measure is necessary (Bagge & Osman, 1998)

*Published suicide-specific instruments (i.e., not assessing depression). Does not include studies of individual variables or scale items. Medline parameters: English language, adult population, since 1966.

Table 1. Suicide Assessment Instruments, 1966—1999* (Cont'd)

Title/reference	Description/purpose	Tested population	Administration	Psychometrics
Harkavy Anis Suicide Survey (HASS-I) (Harkavy-Friedman & Anis, 1989)	3-part instrument: HASS-Demo, 21-item HASS-I, 21-item HASS-II to assess patients' experience with lifetime and recent suicidal behavior	2 samples of high school students (n = 382, n = 279)	Self-report survey	HASS-I internal consistency = $\alpha = .90 - .91$ HASS-II internal consistency = $.91 - .92$, moderately correlated with depression
Violence and Suicide Assessment Form (VASA) (Feinstein & Plutchik, 1990)	10 items to identify and predict violent behavior in ER patients	95 psychiatric emergency service pts (50 admitted, 45 discharged)	Medical record of clinical interview	Internal reliability: $\alpha = .79$, approx 82% sensitivity and specificity between groups with cut-point at 11
Suicide and Aggression Survey (SAS) (Korn et al., 1992)	unknown	20 psychiatric hospital inpatients	Clinical interviews	Interrater reliability: $r = .89$
Suicide Status Form (SSF) (Jobes & Berman, 1993)	2-part form with 7-item checklist & 6-item likert-type scale to facilitate clinical assessment of suicidal patients	52 parasuicidal student-patients and their trained clinicians at a university counseling center	Clinician completes form; patients completes identical likert-type scale	45% patient-clinical exact match, 45% differed + 1 point. Clinician underrated agitation of patients (Eddins & Jobes, 1994).
Suicide Risk Assessment (SRA) (Wang et al., 1997)	73 items to predict suicide in prison	126 referred inmate patients	Clinical-medical records	Correlated with PAI Suicidal Ideation (SUI) $r = .45$ and Suicide Potential Index (SPI)
Self-Inflicted Injury Severity Form (SIISF) (Potter et al., 1998)	Case criteria for distinguishing between "near-fatal" and less severe suicide attempts	715 hospital "suicide cases"	Clinician completes form	Cases significantly higher mean Risk-Rescue rating than noncases interrater reliability $\alpha = .93$
Suicide Questionnaire (Holmes, Mateczun, Lall, & Wilcove, 1998)	137 variables to differentiate suicidal from nonsuicidal Marines	228 suicide attempter, 22 completer, 384 nonsuicidal male Marines	Supervisor completes form	Unknown
Scale for Suicide Ideation—Worst (SSI-W) (Beck et al., 1999)	19-item scale to rate patients' suicide ideation at its worst point in their lives	3,701 psychiatric outpatients (1975-1994) (30 suicides)	Clinical interviews	Internal consistency: $\alpha = .98$, multiple logistic regression showed odds ratio of eventual suicide = 9.11, sensitivity = 80%, specificity = 78%

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13. ABSTRACT (Maximum 200 words) This review summarizes the current status of suicide assessment and focuses on suicide-specific instrumentation and methodologies developed in the last 30 years. The purpose is to provide a brief overview and comparison of modern suicide assessment tools. The emphasis is on instruments and methodologies that may have utility beyond the individual clinical application and that may be administered in a population or group setting. Thirty-one suicide rating scales, as well as case vignettes, psychological autopsies, suicide reviews, and postsuicide assessment instruments are described. The Scale for Suicide Ideation—Worst and the military's postsuicide assessment instruments appear to have the greatest utility.			
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